

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/714,578	RAPOPORT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tuan N. Nguyen	2828	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/23/2006.
2. ☒ The allowed claim(s) is/are 1-15,21-29 and 40-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>3/27/2006</u> .</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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## **DETAIL ACTION**

### ***Response to Amendment***

1. In responding to applicant's amendment filed 02/23/2006, claims 21, 40, 53, 54 have been amended, claims 16-20, 30-39 have been canceled. Authorization for canceling claims 30-39 was given in a telephone interview on March 27, 2006 with Mr. Mark L. Lorbiecki (Attorney for Applicant, Reg. No. 45,643).

## **REASON FOR ALLOWANCE**

### ***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance, with respect to claims 1, 21, and 40, the references of the record fail to teach or suggest a rugged resonator for a laser and the method for resonating a laser beam comprising:

#### **Claim 1:**

A gain medium having two ends mounted inside a laser pump housing assembly, where a resonator assembly having at least four mirrors receive and hold the laser pump housing, wherein the first mirror receive first laser end and strike the third mirror, and the second mirror receive the second end laser beam pass near first reflected beam and strike the fourth mirror, where an intra-cavity optics plate including an output coupler and a high reflector affixed to the optics plate and receive the laser beam from the fourth mirror and third mirror respectively.

#### **Claim 21:**

A gain medium having two ends and an optics plate assembly mounted inside an X-folded resonator, where the resonator assembly having a first mirror and second mirror reflects

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the first and second end beams from the laser two ends, where the third mirror reflects the first mirror beam while the fourth mirror reflects the second mirror beam to the optics plate assembly.

**Claim 40:**

A method resonating a laser gain medium, where a first beam from the first end of the laser gain reflects from first mirror to a second mirror and out to a high reflector, while a second beam from the second end of the laser gain reflects from first third mirror to a fourth mirror, intersecting the first beam between the first and second mirrors, where the reflecting second and fourth mirror beams out to an optical coupler.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Communication Information**

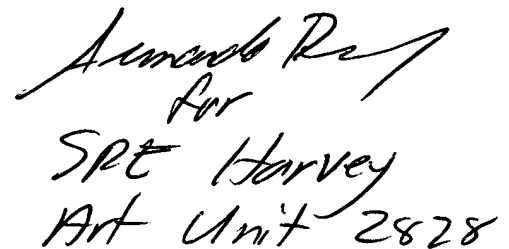
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey Minsun can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan N. Nguyen

A handwritten signature in black ink, appearing to read "Tuan Nguyen", with a long horizontal stroke extending to the left.A handwritten signature in black ink, appearing to read "Amanda Ray", with the word "for" written below it, followed by "SPT Harvey" and "Art Unit 2828" on separate lines.